

Claims

1. A wireless information distribution system comprising:
- 5 a wireless information distribution device and a portable wireless device;
- said wireless information distribution device comprising:
- an external transmitting/receiving device for carrying out wireless communication with said portable wireless device;
- 10 a memory for storing service information; and
- a control unit for retrieving from said memory, responsive and corresponding to a service information request sent by said portable wireless device to said external transmitting/receiving device, when within range, service information for transmission to said portable
- 15 wireless device, and transmitting said retrieved service information to said portable wireless device; and
- said portable wireless device comprising:
- a memory for storing a service information request;
- a display;
- 20 a transmitting/receiving unit for carrying out, when within range, wireless communication with said wireless information distribution device; and
- a control unit for transmitting via said transmitting/receiving unit a communication-ready signal and service information request stored in
- 25 said memory of said portable wireless device to said external transmitting/receiving device, and for displaying service information sent, in response to said service information request, from said external transmitting/receiving device on said display.

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2. The wireless information distribution system of claim 1, wherein said external transmitting/receiving device transmits a communication request signal at regular intervals; and

5 said control unit of said portable wireless device, upon receiving said communication request signal via said transmitting/receiving unit, transmits a service information request via said transmitting/receiving unit to said wireless information device.

10 3. The wireless information distribution system of claim 1, wherein said service information request is for user transportation information, which information includes a departure point and destination point of a user;

15 said memory of said wireless information distribution device storing service information relating to movement of transportation means; and said control unit of said wireless information distribution device retrieving from said memory, service information about movement of a transportation means specified in said service information request.

20 4. The wireless information distribution system of claim 1, wherein said service information request is for user transportation information which includes a departure point and destination point of a user;

25 said memory of said wireless information distribution device storing information on various departure points and destinations, and various corresponding transportation means, transfer points, and transfer options at said various transfer points usable in traveling from said various transportation departure points to said various destination points; and said control unit of said wireless information distribution device

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retrieving from said memory of said wireless information distribution device, service information corresponding to said service information request.

- 5 5. The wireless information distribution system of claim 1, wherein said service information request includes information for identifying a user and entry/exit request of said user; said wireless information distribution device having an entry/exit controlling device; and
- 10 said external transmitting/receiving device being provided in the vicinity of said entry/exit controlling device; and wherein when said control unit of said wireless information distribution device receives an entry/exit request via said transmitting/receiving device, said control unit judges whether to allow the request, and controls the entry/exit
- 15 controlling device based on the judgment.

6. The wireless information distribution system of claim 1, wherein said service information request includes user attributes; said memory of said wireless information distribution device storing

20 said service information and corresponding user attributes; and said control unit of said wireless information distribution device retrieving from said memory of said wireless information distribution device, service information corresponding to said user attributes.

- 25 7. The wireless information distribution system of claim 1, wherein said service information request made by said portable wireless device is real-time based information.

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8. The wireless information distribution system of claim 1, wherein said service information request made by said portable wireless device is local-specific information.

5 9. A wireless information distribution device comprising:
a memory for storing service information;
an external transmitting/receiving device for carrying out radio
communication with mobile wireless device located within range of said
external transmitting/receiving device; and
10 a control unit for retrieving from said memory, responsive and
corresponding to a service information request sent by said portable
wireless device to said external transmitting/receiving device, when
within range, service information for transmission to said portable
wireless device, and transmitting said retrieved service information via
15 said external transmitting/receiving device.

10. The wireless information distribution device of claim 9, wherein
said wireless information distribution has an entry/exit controlling
device;

20 an external transmitting/receiving device is provided in the vicinity of
said entry/exit controlling device;
said control unit, when receiving user information for identifying a user
and a user entry/exit request, judges whether to allow the request,
thereby controlling the entry/exit controlling device based on the
25 judgment.

11. The wireless information distribution device of claim 9, wherein
said service information request includes user attributes;

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5 said memory stores said service information and corresponding said user attributes; and

6 said control unit retrieves, from said memory, service information
7 corresponding to said user attributes included in said service
8 information request.

12. The wireless information distribution device of claim 9, wherein
13 said service information request is for user transportation information
14 including a departure point and destination point of a user;

10 said memory stores movement of transportation means information; and
11 said control unit retrieves, from said memory, service information about
12 movement of said transportation means specified in said user
13 transportation information.

15 13. The wireless information distribution device of claim 9, wherein
16 said service information request is for user transportation information
17 including a departure point and destination point of a user;

18 said memory stores information on various departure points and
19 destinations, and various corresponding transformation means, transfer

20 options at said various transfer points usable in traveling from a
21 departure point to said destination point; and

22 said control unit retrieves information on said transportation means,
23 transfer points, and methods for transferring in traveling from said
24 departure point to said destination point.

25 14. The wireless information distribution device of claim 13, wherein
26 said information about said methods for transferring includes routes for
27 use in changing said transportation means at said transferring points.

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15. The wireless information distribution device of claim 14, wherein said information about methods for transferring includes information about any of stairs, escalators, or elevators available for said user.

16. The wireless information distribution device of claim 13, wherein said information about transfer points includes an amount of time available to a user in changing said transportation means.

17. The wireless information distribution device of claim 13, wherein said transportation means includes any of train, bus, airplane, or ship.

18. The device of claim 9, wherein said external transmitting/receiving device transmits, at regular intervals, a communication request signal.

19. A portable wireless device for carrying out radio communication with an external transmitting/receiving device comprised of a wireless information distribution device comprising:

a transmitting/receiving unit for carrying out radio communication;

a memory for storing service information request;

a display; and

a control unit, for transmitting, when within range, a communication ready signal and a service information request to said external

transmitting/receiving device, and for displaying service information

sent, in response to said service information request, from said external transmitting/receiving device.

20. The portable wireless device of claim 19, wherein said memory

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further stores user information for identifying said user; and
said service information request includes said user information and user
entry/exit request.

21. The portable wireless device of claim 19, wherein said memory
includes user attributes;
said service information request includes said user attributes; and
said service information received via said transmitting/receiving unit
corresponds to said user attributes.

22. The portable wireless device of claim 19, wherein said memory
stores user transportation information including a departure point and
destination point of a user;
said service information request includes said user transportation
information; and said service information received via said
transmitting/receiving unit is for information about movement of said
transportation means specified in said user transportation information.

23. The portable wireless device of claim 19, wherein said service
information request is for user transportation information on user
transportation means, including a departure point and destination of a
user; and
said service information received via said transmitting/receiving unit is
for information on said transportation means, transfer points, and
methods for transferring in traveling from said departure point to said
destination point.

24. The device of claim 19, wherein said transmitting/receiving unit

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carries out radio communication with said external transmitting/receiving device only upon receiving a communication request signal sent from said external transmitting/receiving device.

- 5 25. The portable wireless device of claim 19, wherein said display displays the time for a predetermined period after receiving said service information from said external transmitting/receiving device.

10 26. A method for controlling a wireless information distribution device, wherein the information distribution device comprises:
a memory for storing service information;
an external transmitting/receiving device for carrying out radio communication with a portable wireless device when within range; and
a control unit;
15 the method comprising the steps of:
storing service information;
receiving a service information request of a user of said portable wireless device;
retrieving service information corresponding to the service
20 information request; and
transmitting said retrieved service information via said external transmitting/receiving device.

25 27. The method for controlling a wireless information distribution device of claim 26, wherein said wireless information distribution device has an entry/exit controlling device; and
said external transmitting/receiving device is provided in the vicinity of said entry/exit controlling device;

the method further comprising the steps of:
receiving user information for identifying a user, and an entry/exit
request of a user;
judging whether to give permission for the request; and
controlling the entry/exit controlling device, based on the judgment.

28. The method for controlling a wireless information distribution
device of claim 26, wherein said service information request includes
user attributes;
the method further comprising the steps of:
storing said user attributes corresponding to said service information;
and
retrieving said service information corresponding to said user attributes.

29. The method for controlling a wireless information distribution
device of claim 26, wherein said service information request is for user
transportation information including a departure point and destination
point of a user;
the method comprising the steps of:
determining said transportation means corresponding to said user
transportation information included in said service information request;
and
retrieving said service information about movement of said specified
transportation means.

30. The method for controlling a wireless information distribution
device of claim 26, wherein said service information request is for user
transportation information including a departure point and destination of

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a user;

the method comprising the steps of:

storing information on various departure points and destinations, and

various corresponding transformation means, transfer options at said

5 various transfer points usable in traveling from a departure point to said destination point;

retrieving service information corresponding to said user transportation information included in said service information request.

10 31. A method for controlling a portable wireless device, the mobile wireless device comprising:

a memory for storing service information desired by a user of said portable wireless device;

15 a transmitting/receiving unit for carrying out radio communication, when within range, with an external transmitting/receiving device composed of a wireless information distribution device; and a display; and

the method comprising the steps of:

20 when entering into a radio communication range of said external transmitting/receiving device, transmitting a communication-ready signal to the external transmitting/receiving device and a service information request;

receiving from the external transmitting/receiving device service information in response to said service information request; and

25 displaying said service information on said display.

32. The method for controlling a portable wireless device of claim 31, wherein said service information request includes user information for

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identifying a user of said portable wireless device, and an entry/exit request of said user.

33. The method for controlling a portable wireless device of claim 31, wherein said service information request includes user attributes; and said service information received by said transmitting/receiving unit corresponds to said user attributes.

34. The method for controlling a portable wireless device of claim 31, wherein said service information request is user transportation information including a departure point and destination point of a user; and said service information received via said transmitting/receiving unit includes information about movement of said transportation means specified in said user transportation information.

35. The method for controlling a portable wireless device of claim 31, wherein said service information request is user transportation information including a departure point and destination point of a user; and said service information received via said transmitting/receiving unit is information about itinerary of the user including transportation means to travel from the starting point to the destination, transfer points, and methods for transferring, which is corresponding to said user transportation information included in said service information request.

36. A computer program product for enabling a computer to control a wireless information distribution device,

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the wireless information distribution device comprising:
 a memory for storing service information;
 an external transmitting/receiving device for carrying out radio
 communication with a portable wireless device located within range of
 said external transmitting/receiving device; and
 the computer program comprising the steps of:
 storing service information;
 receiving a service information request via said external
 transmitting/receiving device;
 retrieving service information corresponding to said service information
 request; and
 transmitting said retrieved service information via the external
 transmitting/receiving device.

37. A computer program product for enabling a computer to control a
 portable wireless device;
 the portable wireless device comprising:
 a memory for storing a service information request for information
 desired by a user of said portable wireless device;
 a display; and
 carrying out radio communication, with an external
 transmitting/receiving device of a wireless information distribution
 device, when entering in range of said external transmitting/receiving
 device; and
 the computer program comprising the steps of:
 transmitting to said external transmitting/receiving device via said
 transmitting/receiving unit, when within range, a communication-ready
 signal and said service information request stored in said memory;

receiving service information via the external transmitting/receiving device, in response and corresponding to said service information request; and
displaying said requested service information on said display.

38. A computer-readable media storing a computer program for enabling a computer to control a wireless information distribution device;

the wireless information distribution device comprising:

a memory for storing service information;
an external transmitting/receiving device for carrying out radio communication with a portable wireless device located within range of said external transmitting/receiving device; and

a control unit; and

the computer program comprising the steps of:
storing service information;

receiving a service information request via said external transmitting/receiving device;

retrieving service information corresponding to said service information request; and

transmitting said retrieved service information via said external transmitting/receiving device.

39. A computer-readable media storing a computer program for causing

a computer to control a portable wireless device;

the portable wireless device comprises:

a memory for storing service information request;

a display; and

carrying out radio communication with an external transmitting/receiving device comprised of a wireless information distribution device, when entering in range of said external transmitting/receiving device; and

- 5 the computer program comprises steps of:
- transmitting a communication-ready signal and said service information request stored in said memory, via the transmitting/receiving unit, to the external transmitting/receiving device;
- receiving service information via the external transmitting/receiving
- 10 device, in response to the service information request; and
- displaying received service information on said display.

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